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## NOTICE OF ALLOWANCE AND FEE(S) DUE

67338 7590 03/24/2010

BUCKLEY, MASCHOFF & TALWALKAR, LLC  
GENERAL ELECTRIC COMPANY  
50 LOCUST AVENUE  
NEW CANAAN, CT 06840

EXAMINER

SHERR, CRISTINA O

ART UNIT

PAPER NUMBER

3685

DATE MAILED: 03/24/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/997,640

11/29/2001

George H. Lee

G04-009

7479

TITLE OF INVENTION: SYSTEMS AND METHODS TO FACILITATE ANALYSIS OF A COMMERCIAL MORTGAGE BACKED SECURITY PORTFOLIO BASED ON A CONTRIBUTION OF AN ADDITIONAL MORTGAGE LOAN

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/24/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

67338 7590 03/24/2010

**BUCKLEY, MASCHOFF & TALWALKAR, LLC**  
GENERAL ELECTRIC COMPANY  
50 LOCUST AVENUE  
NEW CANAAN, CT 06840

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/997,640 11/29/2001 George H. Lee G04.009 7479

TITLE OF INVENTION: SYSTEMS AND METHODS TO FACILITATE ANALYSIS OF A COMMERCIAL MORTGAGE BACKED SECURITY PORTFOLIO BASED ON A CONTRIBUTION OF AN ADDITIONAL MORTGAGE LOAN

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$300 \$0 \$1810 06/24/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
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SHERR, CRISTINA O 3685 705-038000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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NEW CANAAN, CT 06840

EXAMINER

SHERR, CRISTINA O

ART UNIT

PAPER NUMBER

3685

DATE MAILED: 03/24/2010

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1490 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1490 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/997,640	LEE, GEORGE H.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CRISTINA SHERR	3685	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal brief filed 10/23/09 and supplemental appeal brief filed 12/14/09.
2. ☒ The allowed claim(s) is/are 2-19 and 21-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

1. This Office Action is in response to the Appeal Brief filed October 23, 2009 and Supplemental Appeal Brief filed December 14, 2009. Claims 2-19, and 21-24 are pending in this case.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Nathaniel Levin, reg. no. 34,860 on March 10, 2010.

4. The claims are amended as follows –

~~2. A method to facilitate analysis of a commercial mortgage backed security portfolio associated with a plurality of mortgage loans, comprising:~~  
retrieving base information of the portfolio from a database by a real time pricing server;  
~~determining base information associated with the portfolio, said determining including a server computer retrieving at least some of the base information from a database;~~  
receiving from a user terminal information associated with an additional mortgage loan by the real time pricing server wherein the information comprises at least one credit rating category and at least one profitability value;  
~~determining information associated with an additional mortgage loan to be added to the portfolio, said determining said information associated with the additional~~

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~~mortgage loan including the server computer receiving said information associated with the additional mortgage loan from a user terminal by the real time pricing server a category size of the at least one credit rating category as a percentage of total loans of the portfolio; and~~

~~said server computer calculating a loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio; calculating by the real time pricing server a trial loan spread of the additional mortgage loan by the real time credit server in accordance with a contribution of the additional loan to the portfolio;~~

~~receiving profitability of the portfolio by the real time pricing server;~~

~~wherein the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size, and wherein said calculating includes:~~

~~determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan;~~

~~calculating by the real time pricing server a profitability of the portfolio with the additional mortgage loan using the trial loan spread wherein the calculating further comprises determining the trial loan spread using the equation~~

~~" $\Delta P / P$ " =  $-D * \Delta Y$ , where  $\Delta P / P$  equals (the trial proceeds – the target proceeds)/(collateral balance), "D" is the duration of the additional mortgage loan, and " $\Delta Y$ " is the change in the trial loan spread;~~

~~wherein said server computer calculates said loan spread in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated.~~

~~determining by the real time pricing server profitability of the additional mortgage loan by subtracting original portfolio profitability from profitability of the portfolio with the additional mortgage loan;~~

comparing by the real time pricing server profitability of the additional mortgage loan to the at least one profitability value; and  
based on the comparing, storing the trial loan spread information and transmitting the trial spread loan value to the user terminal by the real time pricing server.

3. The method of claim 2, wherein the a determination of category sizes for the additional mortgage loan is based on at least one of: (i) a property type, (ii) a risk value, (iii) debt service coverage ratio information, or (iv) loan to value information.

21. An apparatus, comprising: a processor; and  
a storage device in communication with said processor and storing instructions which when executed by said processor cause said processor to execute the steps of:

retrieving base information of the portfolio from a database;

~~determine base information associated with a commercial mortgage backed security portfolio having a plurality of mortgage loans;~~

~~determine information associated with an additional mortgage loan to be added to the portfolio, and~~

receiving from a user terminal information associated with an additional mortgage loan wherein the information comprises at least one credit rating category and at least one profitability value;

determining a category size of the at least one credit rating category as a percentage of total loans of the portfolio;

~~calculate~~ calculating a trial loan spread for the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio;

receiving profitability of the portfolio;

calculating a profitability of the portfolio with the additional mortgage loan using the trial loan spread wherein the calculating further comprises determining the trial loan spread using the equation

“deltaP /P” = -D \* deltaY, where deltaP/P equals (the trial proceeds – the target proceeds)/(collateral balance), “D” is the duration of the additional mortgage loan, and “deltaY” is the change in the trial loan spread;

determining profitability of the additional mortgage loan by subtracting original portfolio profitability from profitability of the portfolio with the additional mortgage loan;

comparing profitability of the additional mortgage loan to the at least one profitability value; and

based on the comparing, storing the trial loan spread information and transmitting the trial spread loan value to the user terminal.

~~wherein the portfolio is associated with a plurality of credit rating categories, each of said credit rating categories denoted by a respective letter grade in a letter grade credit rating system, each credit rating category being associated with a current category size, and wherein said calculating includes:~~

~~determining, for the additional mortgage loan, a category size for each credit rating category, each said category size for the additional mortgage loan expressed as a percentage of a total loan;~~

~~wherein said loan spread is calculated in accordance with an indication from a user as to whether a particular one of said credit rating categories is to be calculated.~~

### *Reasons for Allowance*

5. Claims 2-19, and 21-24 are allowed.
6. The following is the Examiner’s statement of reasons for allowance:



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7. Regarding the claimed terms, Applicant is reminded that a “general term must be understood in the context in which the inventor presents it.” *In re Glaug* 283 F.3d 1335, 1340, 62 USPQ2d 1151, 1154 (Fed. Cir. 2002). Therefore the Examiner must interpret the claimed terms as found on pages 1-82 of the Specification. Clearly almost all the general terms in the claims may have multiple meanings. So where a claim term “is susceptible to various meanings . . . the inventor’s lexicography must prevail . . .” *Id.* Using these definitions for the claims, the claimed invention was not reasonably found in the prior art.

8. The primary reference, Freeman et al, discloses as previously discussed. Freeman, however, does not teach at least calculating by the real time pricing server a profitability of the portfolio with the additional mortgage loan using the trial loan spread wherein the calculating further comprises determining a trial loan spread using the equation

9.  $\Delta P/P = -D * \Delta Y$ , where  $\Delta P/P$  equals (the trial proceeds – the target proceeds)/(collateral balance), “D” is the duration of the additional mortgage loan, and “ $\Delta Y$ ” is the change in the trial loan spread. Moreover, the missing claimed elements from Freeman are not found in a reasonable number of reference(s).

10. For these reasons, independent claims 2 and 21 and their dependent claims 3-19 and 22-24 are allowed.

11. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRISTINA SHERR whose telephone number is (571)272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt, II can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRISTINA OWEN SHERR  
Examiner  
Art Unit 3685

/Calvin L Hewitt II/  
Supervisory Patent Examiner, Art Unit 3685